

CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 24-31.
- After this Amendment: Claims 24-31.

Non-Elected, Canceled, or Withdrawn claims: None.

Amended claims: 24, 25, and 31.

New claims: None.

Claims:

1. – 23. (Canceled)

24. (Currently Amended) In a computer system having a first set of resources and a resource planner for granting reservations of amounts of the resources to activities, a computer-implemented method comprising:

submitting by an activity a request for a reservation of a second set of resources in specified amounts to the resource planner;

determining at the resource planner that the request cannot be granted;

returning from the resource planner to the activity a list, the list including an amount of each currently available resource that satisfied the resource

reservation request and an amount of each currently available resource that did not satisfy the resource reservation request, the amounts being specified in terms of units specific to each resource in the set of resources;

determining at the activity whether the amounts of each currently available resource ~~that did not satisfy the resource reservation request~~ are acceptable will allow the activity to execute predictably;

executing the activity when the resource reservation request is satisfied;

~~using at the activity the amounts of each currently available resource that did not satisfy the resource reservation request to~~ otherwise, reformulate[[e]]ing the request for a reservation of the set of resources to specify new requested amounts using the amounts of each currently available resource;

resubmitting the reformulated request to the resource planner; ~~[[and]]~~

executing the activity using the new amounts; and

in view of changing resource usage or requirements, renegotiating between the resource planner and the activity to change the resource reservation to reflect the changing resource usage or requirements.

25. (Currently Amended) In a computer system having a set of resources and a resource planner for granting reservations of amounts of resources to activities performed on the computer system, a computer-implemented method comprising:

negotiating between the resource planner and activities to reserve shares of the resources with the resource planner on behalf of the activities, wherein the reservation of resources is negotiable;

executing the activity using the shares of the resources;

in view of changing resource usage or requirements, renegotiating between the resource planner and the activities to change reservations of resources on behalf of the activities to reflect the changing resource usage or requirements, wherein the renegotiating includes returning from the resource planner to the activity a list, the list including an amount of each currently available resource that satisfied the negotiable resource reservation request and an amount of each currently available resource that did not satisfy the negotiable resource reservation request, wherein the renegotiating is based on the amount of each currently available resource, the amounts being specified in terms of units specific to each resource in the set of resources and wherein renegotiating further includes determining at the activity whether the amounts of the currently available resources ~~that did not satisfy the resource reservation request are acceptable~~ will allow the activity to execute predictably; and

executing at least one of the activities using between at least some of the amount of one of the currently available resources ~~that did not satisfy the resource reservation request~~ and, voluntarily, no more than the amount of the currently available resources ~~that did not satisfy the resource reservation request~~.

26. (Original) The method of claim 25 wherein the changing resource usage or requirements are the product of a new activity being performed.

27. (Original) The method of claim 25 wherein the changing resource usage or requirements are the product of an activity changing its resource requirements.

28. (Original) The method of claim 25 wherein the changing resource usage or requirements are the product of an activity no longer being performed.

29. (Original) The method of claim 25 wherein the changing resource usage or requirements are the product of a persistent overload of use of a resource.

30. (Original) The method of claim 25 wherein the changing resource usage requirements are the product of a change in resource allocation policy.

31. (Currently Amended) In a computer system having a first set of resources and a resource planner for granting reservations of amounts of resources to activities, a computer-implemented method comprising:

submitting a request for a reservation of a second set of resources in specified amounts from an activity to the resource planner;

determining at the resource planner that the request cannot be granted;

executing the activity when the request can be granted;

when the request cannot be granted, returning from the resource planner to the activity a list, the list including an amount of each resource in a set of resources that is currently available to the activity, the amount being specified in terms of units specific to each resource in the set of resources;

determining at the activity whether the amounts of each resource that are currently available to the activity will allow the activity to execute predictably;

using when the request cannot be granted, reformulating the resource reservation request at the activity based on the amounts of each resource that are currently available to the activity ~~to reformulate the request for a reservation of the set of resources~~ and to specify new requested amounts;

resubmitting the reformulated request to the resource planner; ~~[[and]]~~

executing the activity using the second set of resources; and

in view of changing resource usage or requirements, renegotiating
between the resource planner and the activity to change the resource
reservation request to reflect the changing resource usage or requirements.